

REMARKS/ARGUMENTS

Claims 1-133 are pending.

Claims 1-133 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 2, 3, 55, 95, 112 and 133 are rejected under 35 U.S.C. 103 as being unpatentable over Morris (USP 6,088,036) in view of Gibas (USP 5,675,377).

All the pending claims of the subject application are believed to comply with all requirements of 35 U.S.C. Accordingly, Applicant requests examination and allowance of all pending claims.

The Rejection Under 35 U.S.C. 112

Applicants respectfully traverse the rejection of claims 1-133 under 35 U.S.C. 112 for allegedly failing to meet the enablement requirement with regard to "line sampling." In particular, the Examiner contends that the specification describes only "movement of the line sample," but not how to "achieve the line sample." Office Action at p. 2, paragraph 2. However, the specification clearly provides descriptions of an overall process for line sampling, which involves more than the mere "movement of the line sample." For example, Fig. 1C of the specification provides a flow chart illustrating one embodiment of the invention in which an overall line sampling process is shown to include not only the positioning of a set of line samples across an image plane (likely what the Examiner has referred to as "movement of the line sample") (step 1020), but also the projection of an object onto the image plane (step 1030), followed by the computation of a view of the object along a line sample (step 1040), as well as the combining of views along a set of line samples (step 1050). Fig. 1A further provides a three-dimensional illustration of how the projection of the object onto the image plane may be achieved. In addition, the specification also provides descriptions relating to the further processing of data obtained from line sampling. For example, in one embodiment of the invention, data from a set of line samples is interpolated and/or extrapolated to predict a color value at a set of points on an image plane. See Application at p. 14, line 11-16. Clearly, the specification includes descriptions relating to the overall process of line sampling -- not just an explanation of the "movement of the line sample," as the Examiner alleges.

One of ordinary skill in the art would be enabled to make and use the presently claimed invention, upon reading the entirety of the specification, including descriptions relating to the overall process of line sampling discussed above. Accordingly, withdrawal of the rejection of claims 1-133 based on 35 U.S.C. 112, paragraph one, is respectfully requested.

The Rejection Under 35 U.S.C. 103

Applicants further traverse the Examiner's rejection of claims 1, 2, 3, 55, 95, 112 and 133 under 35 U.S.C. 103 as allegedly unpatentable over the combination of Morris and Gibas. No motivation to combine Morris and Gibas can be found anywhere in either of these references. In fact, Morris and Gibas are directed to fundamentally different image processing problems, so it would not make any logical sense to combine these two references. Morris deals with the problem of sampling a flat image, by using a "sample point array" defined within a two-dimensional pixel area. See Morris, Figs. 2-7 and column 5, lines 3-6. Gibas, on the other hand, deals with the problem of generating a three-dimensional, stereoscopic image, by using "scan rays" that extend radially in three-dimensional space from a particular vantage point. See Gibas, Figs. 1-4, column 1, lines 7-11, column 4, lines 24-39, and column 5, lines 7-30. Clearly, Morris's "sample point array" is completely unrelated to Gibas "scan rays." It is puzzling why anyone would be motivated to combine these two very different concepts, or how such a combination would even be possible. As such, it does not appear that Morris and Gibas can be combined in the manner proposed by the Examiner.

Further, even if it is assumed *arguendo* that Morris and Gibas can be combined, such a combination would still fail to disclose all of the limitations of claim 1. Claim 1 recites "distributing a set of line samples across an object scene such that the distribution of the set of line samples is non-regular." The Examiner points to Fig. 5 and column 6, lines 8-11 of Morris as supposedly disclosing this limitation. However, Fig. 5 of Morris clearly illustrates a regular pattern of sample points. See Morris at column 5, lines 57-58 ("The sub-pixel array of 16 sample points shown in FIG. 5 is a regular array") (*emphasis added*). As to column 6, lines 8-11 of Morris, it merely describes a non-regular arrangement of sample points, which is well known. Thus, neither Fig. 5 nor column 6, lines 8-11 of Morris discloses "distributing a set of line samples across an object scene such that the distribution of the set of line samples is non-regular." Gibas simply does not make up for this deficiency in Morris. Thus, even if Morris and

Gibas were combined, the combination would not teach or suggest all of the limitations of claim 1.

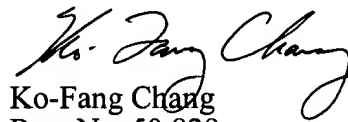
As such, it is believed that Morris cannot be properly combined with Gibas, and even if Morris and Gibas were combined, the hypothetical combination would not teach or suggest all of the limitations of claim 1. Claim 1 is thus believed to be patentable over Morris and Gibas. Claims 2, 3, 55, and 95 each depends from claim 1 and therefore incorporates all of the limitations recited in claim 1. Thus, claims 2, 3, 55, and 95 are patentable for at least the reasons stated above relating to claim 1. Claims 112 and 133 have been rejected based on the same rationale as claim 1. Claims 112 and 133 are also patentable for reasons similar to those stated above relating to claims 1. Accordingly, it is believed that claims 1, 2, 3, 55, 95, 112 and 133 are all patentable over the cited prior art references. Applicants respectfully request that the rejection of these claims under 35 U.S.C. 103 be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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